CHIEF ENGINEER'S CORNER

ELECTRONIC SOURCE SELECTIONS AT SMC
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As part of a big thrust to streamline and modernize the acquisition environment at SMC, SMC 's Acquisition Development Division (SMC/AXD) undertook the electronic Source Selection Facility (SSF) project nine months ago, and completed it last month. At various intervals, Aerospace engineers provided technical contributions and inputs to this development. This article provides an overview of the facility and its operating concepts, as well as the contributions made by the Government and Aerospace.

SOURCE SELECTION FACILITY PROJECT
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 The purpose of the SSF project is to encourage the use of electronic media in SMC source selections, and transition the source selection process from a cumbersome paper process to a streamlined computerized process. The SSF project consisted of developing an electronic Source Selection facility to be used by all SMC SPOs. What now makes our Source Selections electronic is the use of facility computers to assist in performing the activities associated with the Source Selection. The facility is very accomodating and can support various levels of electronic source selections, depending on the number of activities that are computerized and the degree to which they are computerized. For example, two activities that show best use of the facility's computers are: reviewing proposals, and recording evaluators' findings. The recording of evaluators' findings is done using a Database Management System (DBMS) where the results can be organized according to the components of the source selection (Areas, Factors, evaluation standards) and the evaluators, again demonstrating the flexibility available to users. Electronic proposal reviews are supported by the facility if they are generated electronically by the offerors. Close coordination between the SPO and the various offerors regarding the computer hardware and software used to generate and review the proposals is necessary. Several SMC SPOs have used various DBMSs to organize their SS findings over the past year, including EELV, AFSCN, DMSP, SBIRS, and GPS. Electronic proposal reviews have been less prevalent. One activity that will take longer to computerize is the evaluation of bidders' past performance, because most past performance information is currently unavailable electronically.

SMC's electronic Source Selection Facility is located at Fort MacArthur, at the site of a renovated 1915 US army armory. The facility consists of four separate suites that can accommodate four concurrent Source Selections, supporting up to 25-30 personnel each, and processing information ranging in sensitivity from Source Selection Sensitive to Secret. Several suites can be combined for larger Source Selections. One of the main components of the SSF project is the Information System (IS) used, which comprises over $700K worth of computers, network components and software. The SSF Information System is a PC-based client server environment networked using high speed Ethernet cables (100BaseT). All workstations have high resolution 21 inch monitors for

optimal viewing of electronic proposals. The operating system, Windows NT, provides security mechanisms that protect sensitive and classified data from unauthorized access. There are several choices for software to review proposals: MicroSoft Office products (Word, Excel, PowerPoint), and Adobe's Acrobat Reader. The use of Acrobat Reader assumes the proposals are delivered in Portable Document Format (PDF), a format widely used on the World Wide Web. PDF is the preferred format for proposal submittals because it is platform independent and requires fewer computer resources than other formats. The tool used to record evaluators' findings, the Electronic Source Selection (ESS) tool, is an Access-based tool derived from tools developed by EELV and GPS.

Management of the SSF project was performed by SMC/AXD with support from the Chief Engineer's Acquisition Development office at Aerospace. Responsibility for the SSF Information System was assigned to SMC/SC; the computer hardware and software was installed by SMC/SC and their contractors, ATA and CSC. A small team of Aerospace engineers made important contributions to the systems engineering for the SSF Information System at various stages throughout the planning and development process. The Aerospace team generated a concept of operations for the SSF, helped define the network architecture, and helped manage the development of the SSF by identifying and mitigating the main risks associated with the IS. The overarching risk was the schedule: because of slips in the building completion schedule, only two weeks were available for the computer hardware and software to be installed, integrated and configured. Risk mitigation activities focused on three areas: Source Selection Software, Hardware Integration, and Security Accreditation. Three parallel teams were formed to evaluate, prototype, test and integrate the components associated with these risk areas, while the SSF building was under construction. The teams comprised personnel from the Computer Information Resources Division (CIRD), the Computer Systems Division (CSD), and the Systems Engineering Division (SED) under leadership from the Corporate Chief Engineer's Acquisition Development Office. The teams worked closely with SMC/SC, ATA, and CSC. In addition, several meetings were conducted to collect inputs and lessons learned from the SPOs, and to familiarize contractors with electronic Source Selections. EELV, a leading SPO in the area of electronic Source Selections, played a particularly important role in providing inputs and lessons learned.

The SSF opened its doors September 1st 1996, as scheduled, and is currently being used by two Source Selections. Initial response indicates that the SSF Information System was very helpful in streamlining the Source Selection process. For more information contact Ranwa Haddad, Sr Project Engineer, Chief Engineer's Acquisition Development Office, e-mail: haddad@aero.org.